

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number  
WO 01/03332 A1

(51) International Patent Classification<sup>7</sup>: H04B 7/05, H04Q 7/38, 7/22

(21) International Application Number: PCT/FI00/00614

(22) International Filing Date: 4 July 2000 (04.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 991534 5 July 1999 (05.07.1999) FI

(71) Applicant (for all designated States except US): NOKIA NETWORKS OY [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HOLMA, Harri [FI/FI]; Vallikuja 8 C 26, FIN-02600 Espoo (FI). TOSKALA, Antti [FI/FI]; Katajajarjuntie 2-4 C 48, FIN-00200 Helsinki (FI).

(74) Agent: PATENTTITOIMISTO TEKNOPOLIS KOLSTER OY; c/o Kolster Oy AB, Iso Roobertinkatu 23, P.O. Box 148, FIN-00121 Helsinki (FI).

(81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

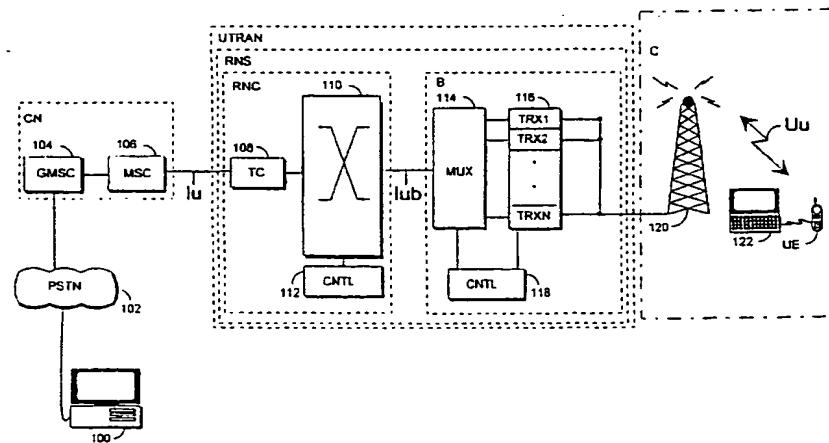
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

[Continued on next page]

(54) Title: METHOD OF IDENTIFYING INFORMATION ADDRESSED TO A USER IN A COMMUNICATION SYSTEM, AND A COMMUNICATION SYSTEM



WO 01/03332 A1

(57) Abstract: The invention relates to a method of identifying information addressed to a user in a communication system, and to a communication system comprising at least one transmitter (120) and at least one receiver (UE), in which communication system the transmitter (120) is arranged to transmit on a shared channel (312) data packets (330A to 330D) provided with a training sequence (300), on which channel two or more receivers (UE) are arranged to receive said data packets (330A to 330D), and the receiver (UE) is arranged to generate a channel estimate on the basis of the training sequence (300). The communication system is arranged to provide the data packets (330A to 330D) addressed to different receivers (UE) or receiver groups with different training sequences (300), the receiver (UE) is arranged to identify and further process the data packets (330A to 330D) addressed to the receiver (UE) and whose training sequence (300) the receiver (UE) identifies, and the receiver (UE) is arranged to ignore the data packets (330A to 330D) whose training sequence (300) the receiver (UE) does not identify.